



The New Jersey Watershed Watch Network

The New Jersey Department of Environmental Protection (NJDEP) has created a four-tiered approach to volunteer water quality monitoring. The tiers are defined by the purpose of monitoring, the intended data use and the intended data users.

The four-tiered approach allows for volunteers to know upfront what they need to do to get their data used by the NJDEP and assures the Department's data users of the quality of the data.

The four tiers are:

TIER A: Environmental Education (not addressed)

TIER B: Stewardship

TIER C: Community Assessment

TIER D: Indicators/Regulatory Response

Examples of how the Tiers may apply are: if the purpose of a monitoring project is for regulatory response from the NJDEP then the water resource managers need data of a high level of quality assurance. The organization will need to define the intended data use, and define the primary data user. The organization will need a quality assurance project plan (QAPP) that has been reviewed by the intended data users. This type of monitoring activity would be a TIER D. A second example is if the purpose of the monitoring program is to collect data to educate local residents within a watershed, the level of rigor is not as detailed. This type of monitoring activity would be considered TIER A.

Once volunteers define the purposes of the monitoring efforts, please contact the Watershed Watch Network at the NJDEP at (609) 292-2113 to help determine your data uses.





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TIER B: Stewardship

<p>Biological Monitoring Requirements</p> <p>Study design needed</p> <p>Site selection required before going out in the field</p> <p>Training required, formal or informal</p> <p>Equipment inspected annually</p> <p>Locations mapped</p> <p>Identification down to Order level required</p>	<p>Chemical Monitoring Requirements</p> <p>Study design needed</p> <p>Site selection required before going out in the field</p> <p>Training required, formal or informal</p> <p>Equipment inspected annually</p> <p>Locations mapped</p> <p>Simple water quality test kits okay to use</p>
<p>Visual Monitoring Requirements</p> <p>Study design needed</p> <p>Site selection required before going out in the field</p> <p>Training required, formal or informal</p> <p>Equipment inspected annually</p> <p>Locations mapped</p> <p>Photo documentation required</p>	<p>Physical Monitoring Requirements</p> <p>Study design needed</p> <p>Site selection required before going out in the field</p> <p>Training required, formal or informal</p> <p>Equipment inspected annually</p> <p>Locations mapped</p> <p>Simple water quality test kits okay to use</p>



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TIER C: Community Assessment

<p>Biological Monitoring Requirements</p> <p>Study design needed</p> <p>Internally approved QAPP, intended data user approved and copy on file with Volunteer Monitoring Program</p> <p>Fixed monitoring stations</p> <p>Training required</p> <p>Field visit with Volunteer Monitoring Coordinator</p> <p>GPS coordinates or paper copy of topographic map or a GIS map required</p> <p>Annual equipment inspection w/ log</p> <p>Identification down to Family level required</p>	<p>Chemical Monitoring Requirements</p> <p>Study design needed</p> <p>Internally approved QAPP, intended data user approved and copy on file with Volunteer Monitoring Program</p> <p>Fixed monitoring stations</p> <p>Training required</p> <p>Field visit with Volunteer Monitoring Coordinator</p> <p>GPS coordinates or paper copy of topographic map or a GIS map required</p> <p>Annual equipment inspection w/ log</p> <p>Calibration of equipment needed w/ proper documentation</p> <p>Test kits with statement of accuracy from manufacturing on file with QAPP</p>
<p>Visual Monitoring Requirements</p> <p>Study design needed</p> <p>Internally approved QAPP, intended data user approved and copy on file with Volunteer Monitoring Program</p> <p>Fixed monitoring stations</p> <p>Training required</p> <p>Field visit with Volunteer Monitoring Coordinator</p> <p>GPS coordinates or paper copy of topographic map or a GIS map required</p> <p>Calibration of equipment needed w/ proper documentation</p> <p>Photo documentation required</p>	<p>Physical Monitoring Requirements</p> <p>Study design needed</p> <p>Internally approved QAPP, intended data user approved and copy on file with Volunteer Monitoring Program</p> <p>Fixed monitoring stations</p> <p>Training required</p> <p>Field visit with Volunteer Monitoring Coordinator</p> <p>GPS coordinates or paper copy of topographic map or a GIS map required</p> <p>Annual equipment inspection w/ log</p> <p>Calibration of equipment needed w/ proper documentation</p> <p>Test kits with statement of accuracy from manufacturing on file with QAPP</p>



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TIER D: Indicators/Regulatory Response

<p>Biological Monitoring Requirements</p> <p>Study design needed</p> <p>QAPP approved by data user and the Office of Quality Assurance on file at DEP, Volunteer Monitoring Program</p> <p>Fixed monitoring stations</p> <p>Training required</p> <p>Possible annual audit via Office of Quality Assurance and/or Volunteer Monitoring Coordinator</p> <p>GPS coordinates or paper copy of topographic map or a GIS map required</p> <p>Calibration of equipment needed with proper documentation</p> <p>Samples to be sent to a lab for analysis or must present proof that the samples are accurately identified by supervisor on site. Samples should be sent out to a certified lab for accuracy check</p> <p>Identification down to Family level and/or Genus and Species</p>	<p>Chemical Monitoring Requirements</p> <p>Study design needed</p> <p>QAPP approved by data user and the Office of Quality Assurance on file at DEP, Volunteer Monitoring Program</p> <p>Fixed monitoring stations</p> <p>Training required</p> <p>Possible annual audit via Office of Quality Assurance and/or Volunteer Monitoring Coordinator</p> <p>GPS coordinates or paper copy of topographic map or a GIS map required</p> <p>Calibration of equipment needed with proper documentation</p> <p>Samples sent to lab or for "analysis immediately parameters" DEP Lab Certified Supervisor must be present. Samples should be sent out to a DEP certified lab for accuracy check</p> <p>Meters and/or test kits with statement of accuracy from manufacturing on file with QAPP</p>
<p>Visual Monitoring Requirements</p> <p>Study design needed</p> <p>QAPP approved by data user and the Office of Quality Assurance on file at DEP, Volunteer Monitoring Program</p> <p>Fixed monitoring stations</p> <p>Training required</p> <p>Possible annual audit via Office of Quality Assurance and/or Volunteer Monitoring Coordinator</p> <p>GPS coordinates or paper copy of topographic map or a GIS map required</p> <p>Calibration of equipment needed with proper documentation</p> <p>Photo documentation required</p>	<p>Physical Monitoring Requirements</p> <p>Study design needed</p> <p>QAPP approved by data user and the Office of Quality Assurance on file at DEP, Volunteer Monitoring Program</p> <p>Fixed monitoring stations</p> <p>Training required</p> <p>Possible annual audit via Office of Quality Assurance and/or Volunteer Monitoring Coordinator</p> <p>GPS coordinates or paper copy of topographic map or a GIS map required</p> <p>Calibration of equipment needed with proper documentation</p> <p>Samples sent to lab or for "analysis immediately parameters" DEP Lab Certified Supervisor must be present</p>